



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
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May 11, 2004

Mr. Benjamin H. Grumbles  
Acting Assistant Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for recent letter regarding Washington State's compliance with the BEACH Act.

On July 1, 2003, the state of Washington submitted revised bacterial standards to the Environmental Protection Agency (EPA) Region 10 office for approval under the Clean Water Act. Those revised standards, which were developed explicitly to ensure that the state would provide levels of protection that either meet or exceed EPA's current guidance, have not yet been acted on by EPA.

Our state adopted water quality standards have the following protection:

**All marine waters in the state which include shellfish harvesting as a designated use along with primary contact recreation have to meet a geometric mean fecal coliform concentration of 14 colonies/100ml, with not more than 10 percent of the samples above 43/100ml. All marine waters which have secondary contact recreation as the sole contact recreation use must meet a geometric mean enterococci concentration of 70/100ml, with not more than 10 percent of the samples above 208/100ml.**

We recognize that EPA would prefer that every state use enterococci in all their marine waters to protect water contact recreation. However, comparative analyses show that in our state a fecal coliform concentration of 14/100ml is more stringent than an enterococci concentration of 35/100ml. Given that the fecal coliform criteria is more stringent, and that it protects the most sensitive use in those waters where it is used, adding enterococci would create significant and unnecessary monitoring costs for the state and its cooperators. Since the Federal Food and Drug Administration, which regulates bacteria criteria for shellfish harvesting, continues to require fecal coliform testing, and our criteria is protective of human health, we see no compelling reason to adopt dual indicators that would require dual monitoring in our state.

In the secondary contact waters, where shellfish harvesting is not a designated use, Washington established an enterococci standard that is more protective than the EPA's recommendation (a geometric mean of 70/100ml rather than 350/100ml).

In trying to answer the question of whether it was appropriate to add enterococci criteria to all of its marine waters, the state conducted parallel sampling for both fecal coliform and enterococci in its ambient monitoring program. In addition to the sampling that was done directly by the state, we were able to obtain similar comparison studies that were done in our marine waters by other governmental entities concerned with the bacterial protection of beaches within their jurisdiction.

Over a thousand paired samples were examined from marine waters across the state. Of these, over ninety-nine percent of the samples that met the shellfish harvesting fecal coliform criteria of 14/100ml, also met the enterococci criteria of 35/100ml. Based on a regression analyses ( $r^2=0.71$ ), a fecal coliform concentration of 14/100ml was found to be generally equivalent to an enterococci concentration of 11.3/100ml.

While the data showed only a moderately strong predictive relationship ( $r^2=0.71$ ) between enterococci concentrations and fecal coliform concentrations, it showed with almost no exception that individual samples that met the 14/100ml fecal coliform criteria, also met the 35/100ml enterococci criteria. This means that even when examined at an individual sample level, the 14/100ml criteria provides more protection than the 35/100ml enterococci criteria does in our waters. Since the actual criteria are based on geometric means rather than on single samples, it is very unlikely the rare sampling events, where the 14/100ml fecal coliform criteria is not the most stringent indicator, would translate into beaches with geometric means exceeding 35/100ml enterococci. Technical discussion documents and economic analyses supporting this technical assessment and the decision to rely on the shellfish harvesting criteria were submitted to EPA Region 10 along with our rule revision last summer.

In this era of shrinking budgets and expanding expectations, it is critical that we use good sense in selecting criteria for monitoring. We adopted enterococci in those waters where it was an improvement over our old fecal coliform criteria. But we retained very stringent fecal coliform criteria in those waters where adding enterococci would not have provided increased health protection for our citizens, but would have increased costs. The federal regulations do not require that states establish criteria for every type of use. Rather, they allow states to focus on those uses that require the most stringent criteria. This is exactly what we have done.

Our state voluntarily undertook a public review of its bacterial standards and used the best available information to make an informed decision that would fully protect the recreational uses of the state's marine waters. During this same period, Washington voluntarily participated in the beach monitoring program established under the BEACH Act so that it could begin to establish more coordinated procedures for protecting beach goers in our state.

Mr. Benjamin H. Grumbles

May 11, 2004

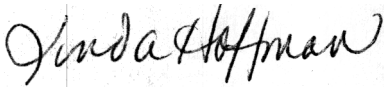
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Washington continues to set some of the most protective standards in the nation for its citizens and the natural environment. In developing this national rule, we urge EPA to take a closer look at the criteria values and the actual levels of protection they provide, rather than to rely only on the choice of indicators. We believe that taking this step will show that Washington is in compliance with the Act, and that the state should not be included in the upcoming national rule for marine waters.

For further information on our states water quality standards and our bacterial studies, please contact Melissa Gildersleeve at (360) 407-6461.

Please let me know how we can further assist you in your review of our state standards.

Sincerely,

A handwritten signature in cursive script that reads "Linda Hoffman".

Linda Hoffman  
Director

cc: Randy Smith, EPA Region 10

Mr. Benjamin H. Grumbles

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bcc: Melissa Gildersleeve